JAMES RAY CLAY

Dr. James Ray Clay, age 57, died on 16 January, after collapsing while riding his bicycle home from work.

Ray was born 8 November 1938, in Burley, Idaho. He was appointed to the Naval Academy in 1956. After leaving the Academy in 1959, he continued his university studies in mathematics at the University of Utah in Salt Lake City and the University of Washington in Seattle where he obtained a PhD in 1966. He worked for Elmco Corporation in Salt Lake City, as a computer programmer, for Boeing in Seattle, as a teaching assistant at the University of Washington, an assistant professor at the US Department of Agriculture Graduate School, and as an assistant professor at George Washington University, both in Washington, DC, where he was working full time as a mathematician for the Central Intelligence Agency.

In 1966, Ray accepted a position as assistant professor at the University of Arizona in Tucson. He was promoted to associate professor three years later, and was acting head of the department between 1969 and 1972. He was then promoted to full professor and held that Position ever since.

Dr. Clay, a professorat the University of Arizona for 30 years, had his book *Nearrings Geneses and Applications*, published by Oxford University Press in 1992. His research with nearrings, a type of algebraic structure of which many varied examples contribute to geometry and coding theories, has been used in Constructing error-correcting codes. The codes are used to transmit messages from space vehicles to earth This book can be found in university libraries throughout the world, and has been used as a text for graduate courses in mathematics in Europe, Asia, Africa and the United States, In addition, Ray has Published more than 50 research articles in professional journals, each containing mathematical results newly discovered by him.

He was a guest professor in Germany, England, Scotland, Austria, and South Africa. He had also lectured at universities in Bulgaria Hungary, Italy, Ireland, India, Taiwan, Hung Kong, Thailand, Singapore, and mainland China. He had received numerous prestigious awards including the "Distinguished US Senior Scientist Award" from the West German government when he was only 34, which made him the youngest recipient ever. He was also selected for inclusion in the golden Anniversary 50th Edition of Who's Who in America, an honor given to fewer than one in 2,500 persons.

Ray recently attended the 35th reunion of the Class of 1960 with his wife and Classmates and had an opportunity to share many remembrances and experiences.

Dr. Clay is survived by his wife Carol and daughters Thea Patricia Thompson of Tucson, AZ, Christine Marie Kenney of Gilbert, AZ, and Terri Susan Fox of Elizabethtown PA. A funeral was held on 20 January at the Church of Jesus Christ of Latter-Day Saints followed by burial at the church's Binghampton Cemetery.

William E. Lewis, Jr. '60 Shipmate, June 1996